CASE REPORT

Lib Oncol. 2020;48(1):35–38

doi: 10.20471/LO.2020.48.01.06

LARGE FIBROEPITHELIAL POLYP IN PROSTATIC URETHRA OF 29-YEAR-OLD MALE PATIENT

TOMISLAV KULIŠ[1], TONI ZEKULIĆ[1], MARIJANA ĆORIĆ[2], MARJAN MARIĆ[1], NIKOLA KNEŽEVIĆ[1], IVANA PUŠENJAK[3], TVRTKO HUDOLIN[1] and ŽELJKO KAŠTELAN[1]

[1]Department of Urology, University Hospital Centre Zagreb, University of Zagreb School of Medicine, Zagreb, Croatia;
[2]Department of Pathology and Cytology, University Hospital Centre Zagreb, University of Zagreb School of Medicine, Zagreb, Croatia;
[3]Department of Anesthesiology, Reanimatology and Intensive Care, University Hospital Centre Zagreb, University of Zagreb School of Medicine, Zagreb, Croatia

Summary

We present a young adult male patient with suspicious lesion in urinary bladder found on routine exam using ultrasound. Urethrocystoscopy was performed and revealed urethral fibroepithelial polyp that was causing partial and total obstruction of urine flow. We have documented this case with a series of high-quality endoscopic images.

KEY WORDS: *fibroepithelial polyp, dysuria, transurethral resection, prostatic urethra*

INTRODUCTION

Fibroepithelial polyps (FEP) are rare benign tumors of mesodermal origin, the most commonly found in the upper urinary tract, but can be also found in lower urinary tract (1). These tumors are usually diagnosed during pediatric and adolescent years with male gender predominance, but cases have been reported in nearly all ages and gender (1-7).

Most FEPs develop in the ureters and only a small number in the posterior urethra or bladder (5). There are still controversies regarding etiology of FEP, the most popular being congenital anomaly theory and chronic urothelial irritants theory (8, 9). Patients most commonly present with hematuria, dysuric symptoms, hesitancy, incomplete emptying, urinary stream restriction or urinary retention (1,4,6,10). Diagnosis of urethral and bladder FEP is made by transurethral cystoscopy which can be combined with voiding cystourethrography or retrograde urethrography. FEP can show mobility and change its position on contrast urograms, unlike other malignant lesions of ureter and urethra (11). Regardless of diagnostic method used, transurethral resection and pathologic examination is required to confirm diagnosis in order to exclude more malignant neoplasms such as urothelial papilloma (1,7,8,12). Multiple studies have shown that recurrence and severe complications after transurethral excision of FEP are infrequent (1,10,13-15).

In this case report, we present a series of high-quality endoscopic images obtained during transurethral resection of FEP.

***Corresponding author**: Tomislav Kuliš, University Hospital Center Zagreb, Department of Urology, Kišpatićeva ulica 12, 10000 Zagreb, Croatia.*
e-mail: tkulis@gmail.com

CASE REPORT

A 29-year-old caucasian male presented as an outpatient after suspicious lesion of urinary bladder was refer to us after an ultrasound examination during his general medical examination. The patient was asymptomatic, with no history of hematuria or other urinary symptoms. He has had vesicourinary reflux in pediatric age, but otherwise was in good health.

Ultrasound showed a papillary process located in the bladder neck. There was no evidence of hydroureteronephrosis or other genitourinary system anomalies. While the urine analysis and examination were within the normal range, urine cytology showed atypical transitional epithelium cells with enlarged and degenerative altered nuclei.

Transurethral cystoscopy verified 2 cm large, elongated papillary process, originating from prostatic colliculus and protruding into the urinary bladder. After the hospital admission, transurethral resection of polyp was performed and sent for pathologic examination. Postprocedural recovery was uneventful, and the patient was released three days after surgery without urinary catheter and was voiding spontaneously and without difficulties.

Histologic sections confirmed the diagnosis of fibroepithelial polyp.

Figure 1. Gross appearance of FEP. Non obstructive position. FEP grows from the verumontanum

DISCUSSION

Fibroepithelial tumors of lower urinary tract are indeed rare pathology, especially in adults. It is essential to distinguish these lesions with no malignant potential from those with one.

Although most common symptoms are hematuria and obstructive voiding symptoms, the patient did not complain about any particular of these symptoms before surgery. After surgery, he reported significantly better voiding quality upon catheter removal. This finding indicates that the patient's conception of normal voiding was subjective, meaning that a patient's history alone can lead in wrong direction in some cases.

In these series of endoscopic images, we are presenting a gross appearance of FEP located on

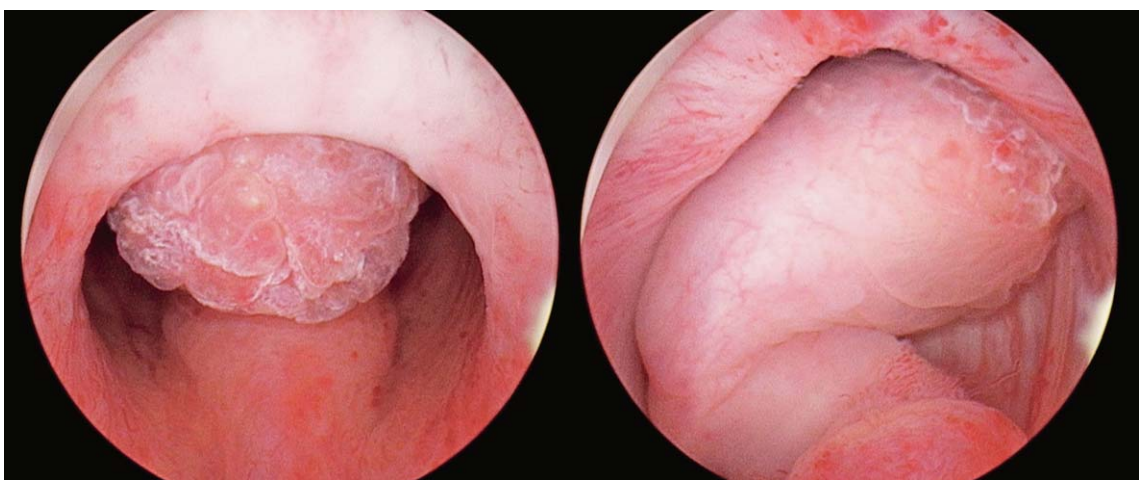

Figure 2. Two of the possible obstructive positions. A rolling valve mechanism.

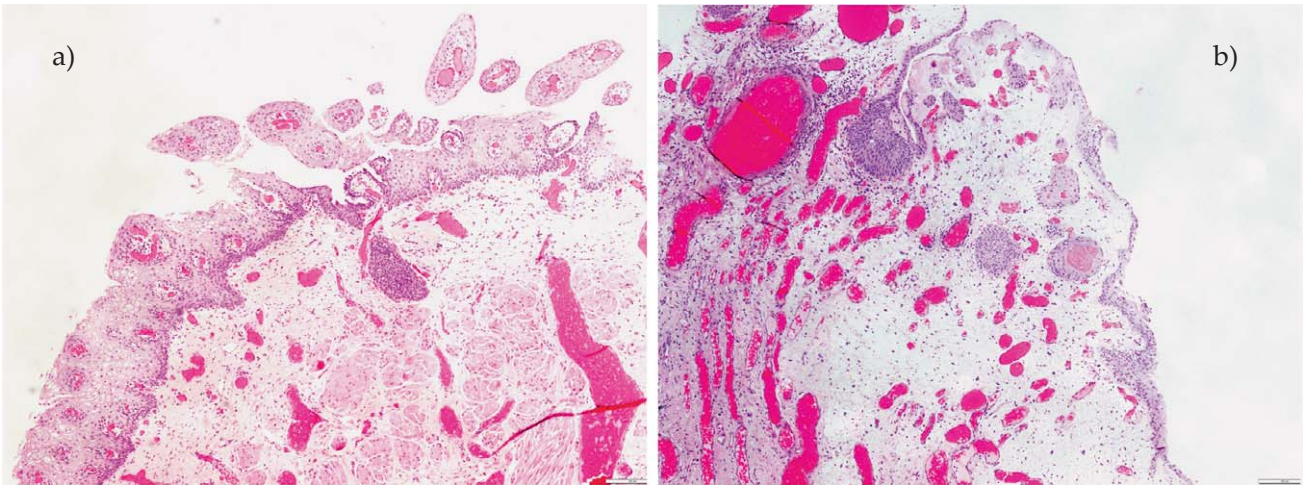

Figure 3. Histologic sections: formations made of fibrous stroma and numerous vascular spaces, partially filled with erythrocytes

the prostatic part of urethra. Figure 2 shows the obstructing *rolling valve* mechanism, resulting in sudden obstruction in urine flow.

Histologic sections revealed formation made of fibrous stroma and numerous vascular spaces, partially filled with erythrocytes. The surface epithelium was partially exfoliated and have had characteristics of a proper urothelium. The epithelium was indented and it formed round isle-like nests, a finding consistent with that of fibroepithelial polyp (16).

CONCLUSION

Although fibroepithelial polyps are rare pathology of lower urinary tract, it is important to keep in mind it can be the source of voiding difficulties, especially in younger adults. Cystoscopy and histopathological evaluation are essential for excluding malignancy. Cases like this present a valuable and interesting example of lower urinary tract pathological variety.

REFERENCES

1. Kumar A, Das SK, Trivedi S, Dwivedi US, Singh PB. Genito-urinary polyps: summary of the 10-year experiences of a single institute. Int Urol Nephrol. 2008; 40(4):901-7.
2. Aita GA, Begliomini H, Mattos D, jr. Fibroepithelial polyp of the urethra. Int Braz J Urol : official journal of the Brazilian Society of Urology. 2005;31(2):155-6.
3. Roller MF, Naranjo CA. Benign urethral polyp of prostatic urethra. Urology. 1975;6(1):34-6.
4. Salehi M, Falahatkar S, Neiroomand H, Akbarpour M. Fibroepithelial congenital polyp of prostatic urethra in an adult man. Urol J. 2009;6(4):301-2.
5. Williams TR, Wagner BJ, Corse WR, Vestevich JC. Fibroepithelial polyps of the urinary tract. Abdom Imaging. 2002;27(2):217-21.
6. Kearney GP, Lebowitz RL, Retik AB. Obstructing polyps of the posterior urethra in boys: embryology and management. J Urol. 1979;122(6):802-4.
7. Demircan M, Ceran C, Karaman A, Uguralp S, Mizrak B. Urethral polyps in children: A review of the literature and report of two cases. Int J Urol. 2006;13(6):841-3.
8. Lam JS, Bingham JB, Gupta M. Endoscopic treatment of fibroepithelial polyps of the renal pelvis and ureter. Urology. 2003;62(5):810-3.
9. Bhalla RS, Schulsinger DA, Wasnick RJ. Treatment of bilateral fibroepithelial polyps in a child. J Endourol. 2002;16(8):581-2.
10. De Castro R, Campobasso P, Belloli G, Pavanello P. Solitary polyp of posterior urethra in children: report on seventeen cases. Eur J Pediatric Surg 1993;3(2):92-6.
11. Harvin HJ. Ureteral fibroepithelial polyp on MDCT urography. Am J Roentgenol. 2006;187(4):W434-5.
12. Tsuzuki T, Epstein JI. Fibroepithelial polyp of the lower urinary tract in adults. Am J Surg Pathol. 2005;29 (4):460-6.
13. Anjum MI, Ahmed M, Shrotri N, Azzopardi A, Mufti GR. Benign polyps with prostatic-type epithelium of the urethra and the urinary bladder. Int Urol Nephrol. 1997;29(3):313-7.
14. Gleason PE, Kramer SA. Genitourinary polyps in children. Urology. 1994;44(1):106-9.
15. Downs RA. Congenital polyps of the prostatic urethra. A review of the literature and report of two cases. Br J Urol. 1970;42(1):76-85.
16. Nowak MA, Marzich CS, Scheetz KL, McElroy JB. Benign fibroepithelial polyps of the renal pelvis. Arch Pathol Lab Med. 1999;123(9):850-2.

Lib Oncol. 2020;48(1):35–38

Sažetak

VELIKI FIBROEPITELNI POLIP PROSTATIČNE URETRE DVADESETDEVETOGODIŠNJEG PACIJENTA

T. Kuliš, T. Zekulić, M. Ćorić, M. Marić, N. Knežević, I. Pušenjak, T. Hudolin and *Ž. Kaštelan*

Prikazan je slučaj dvadesetdevetogodišnjeg muškarca kojem je na redovnom sistematskom pregledu, ultrazvukom je pronađena sumnjiva lezija u mokraćnom mjehuru. Uretrocistoskopijom je potvrđen uretralni fibroepitelni polip, mogući uzročnik potpunog ili djelomičnog zastoja mokrenja. Slučaj je dokumentiran serijom visokokvalitetnih endoskopskih fotografija.

KLJUČNE RIJEČI: *fibroepitelni polip, dizurija, transuretralna resekcija, prostatična uretra*